

REMARKS

Status of the claims

Claims 1-10 are pending in the application. Claims 9 and 10 have been amended herein. The amendments to claims 9 and 10 are clarifying in nature and non-narrowing. Entry and consideration thereof are respectfully requested.

Rejections under 35 U.S.C. §112, 2nd paragraph

Claims 9-10 have been rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite. More specifically, claim 9 has been rejected as being indefinite in the recitation of “wherein the means to prepare the mass of soybeans and sprouted brown rice is a means which places a layer.”

Claim 10 has been rejected as being unclear in the recitation of “wherein the means to prepare the mass of soybeans and sprouted brown rice is a means using a device for wrapping bean jam.” Claims 9 and 10 have been amended to clarify the steps of the recited process. Withdrawal of the rejection is therefore respectfully requested.

Claim 10 has been further rejected with the assertion that the term “wrapping bean jam” is unclear. Applicants traverse this rejection and withdrawal thereof is respectfully requested. The corresponding Japanese term for a “device for wrapping bean jam” is “houanki”. The literal translation of “houanki” is “device for wrapping bean jam”. However, this term is more generally translated meaning an “encrusting machine”. As such, claim 10 has been amended to use the more common translation of the term, i.e. “encrusting machine”. Withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1-10 have been rejected under 35 U.S.C. §103 as being obvious over Hachmeister et al. (Ref. R1 in the Office Action). Hachmeister et al. is asserted to teach a process for making tempeh using soybeans fermented by *Rhizopus oligosporous*. Hachmeister et al. is further asserted to teach the production of tempeh-like products using cereal grains as substrates. Hachmeister et al. further is relied on as teaching that the problem with using whole grains to make tempeh is that the resulting tempeh lacks integrity and was not suitable for slicing. The

Examiner asserts that the solution to this problem, i.e. cracking, slicing or splitting the grain, is obvious. Applicants traverse this rejection and withdrawal thereof is respectfully requested.

The instant invention, as encompassed by independent claim 1, is directed to, a fermented food obtainable by fermenting sprouted brown rice with a *Rhizopus* mold.

Prior art teachings –

Hachmeister et al. state at page 172, right column, lines 22-24, “It is obvious that slightly modifying the surface of grain via cracking, slicing or splitting is essential for good growth of the mold”. Based on this disclosure, the Examiner states that, “Given the modifications of the whole grain for mold growth is disclosed by R1, using sprouted rice as presently claimed would be obvious” See page 3, lines 19-20 of the Office Action. However, the Examiner’s assessment of the reference teachings in view of the claimed invention is technically incorrect. Cracking, slicing and splitting, as disclosed in Hachmeister et al. is a physical treatment, whereas sprouting is a biological treatment. The two approaches, i.e. physical versus biological would not be considered to be interchangeable by one skilled in the art. One of ordinary skill in the art would not believe that sprouting would have a similar effect to cracking, slicing or splitting as taught in Hachmeister et al. Indeed, if a physical treatment, such as cracking, slicing or splitting is used on rice, the rice would no longer be capable of sprouting. As such, the disclosure in Hachmeister et al. rather than suggesting the use of sprouted rice, in fact, teaches away from sprouted rice, since the treatments in Hachmeister et al. would render the rice incapable of sprouting.

As indicated above, Hachmeister et al. actually teaches away from the instant invention and the use of sprouted rice. The rice in Hachmeister et al. was polished and cracked. See page 173, Table 22. When rice (e.g. brown rice) is polished, the germ is removed, thus rendering the rice incapable of sprouting. Cracking will similarly render the rice incapable of sprouting. Thus, it is impossible for the the rice used in Hachmeister et al. to sprout.

The Examiner further states that “The sprouted (germinated) grain would have the amylase system activated so that the tempeh mold which is not usually an amylase producer will grow better on the substrate.” See page 3, line 20, through page 4, line 1 of the Office Action.

However there is no such teaching in Hachmeister et al. If the Examiner is taking official notice of such knowledge, Applicant respectfully request that the assertion be supported by a clear teaching in the prior art. Indeed, contrary to the assertion of the Examiner, the asserted technical point of the Examiner would not have been common technical knowledge at the time of the instant invention.

Finally, the Examiner states on page 4, lines 1-2 of the Office Action that “It would be also obvious to use brown rice for the color it will impart to the finished product” Thus, the Examiner appears to interpret “brown rice” only as rice, which is brown in color. However, this interpretation is technically incorrect. Rice is typically used for food after it is polished. Rice, prior to polishing, is called “brown rice” and after polishing is referred to as “white rice”. Thus, the term “brown rice” has is not termed so because of the color, rather “brown rice” is also known as “unpolished rice” or “unmilled rice”, with “brown rice” being the most generally used term for rice, which has not been polished. Attached hereto is an entry from wikipedia.org, which explains the meaning of “brown rice”. As stated in the Wikipedia entry, “**Brown rice** (or “hulled rice”) is unmilled or partly milled rice, a kind of whole, natural grain.” Wikipedia further states that in comparison to white rice, “Brown rice and white rice have similar amounts of calories, carbohydrates, and protein. The main differences between the two forms of rice lie in processing and nutritional content. When only the outermost layer of a grain of rice (the husk) is removed, brown rice is produced. To produce white rice, the next layers underneath the husk (the bran layer and the germ) are removed, leaving mostly the starchy endosperm.” Thus, contrary to the assumption of the Examiner, the term “brown rice” is not due to the color of the rice but rather because it is unmilled.

Importantly, the rice of Table 22 of Hachmeister et al. is not brown rice, but rather white rice, since it was polished. As a result, and as noted above, white rice cannot sprout because the germ has been removed. As such, it is not possible to achieve the present invention from Hachmeister et al. Nor is there any suggestion to one of ordinary skill in the art to make the necessary critical modifications to Hachmeister et al. to achieve the invention, i.e. to first replace polished rice with unpolished rice and then to replace the physical treatments of cracking, slicing

Application No. 10/581,086
Amendment dated
Reply to Office Action of September 16, 2009

Docket No.: 3749-0113PUS1

or splitting with the biological treatment of sprouting. As such, the present invention is not obvious over Hachmeister et al. and withdrawal of the rejection is respectfully requested.


In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact MaryAnne Armstrong, PhD, Reg. No. 40,069, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: December 16, 2009

Respectfully submitted,

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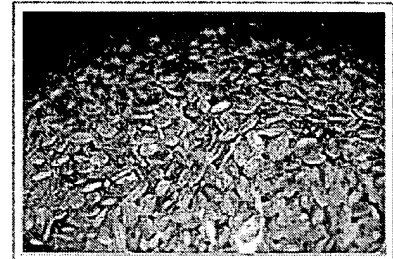
Attachments: Wikipedia entry for "brown rice"

Brown rice

From Wikipedia, the free encyclopedia

Brown rice (or "hulled rice") is unmilled or partly milled rice, a kind of whole, natural grain. It has a mild nutty flavor, is chewier and more nutritious than white rice, and becomes rancid much more quickly. Any rice, including long-grain, short-grain, or sticky rice, may be eaten as brown rice.

In much of Asia, brown rice (Chinese: 糙米; pinyin: *cāomǐ*; literally "rough rice"; Korean: 현미; *hyeonmi* Japanese: 玄米; *genmai*; Thai: ข้าวกล้อง; Vietnamese: *gạo lứt*) is associated with poverty and wartime shortages, and in the past was rarely eaten except by the sick, the elderly and as a cure for constipation. This traditionally denigrated kind of rice is now more expensive than common white rice, partly due to its relatively low supply and difficulty of storage and transport. Today brown rice is a staple for health conscious eaters.



Brown rice

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White rice comparison

Brown rice and white rice have similar amounts of calories, carbohydrates, and protein. The main differences between the two forms of rice lie in processing and nutritional content.

When only the outermost layer of a grain of rice (the husk) is removed, brown rice is produced. To produce white rice, the next layers underneath the husk (the bran layer and the germ) are removed, leaving mostly the starchy endosperm.

Several vitamins and dietary minerals are lost in this removal and the subsequent polishing process. A part of these missing nutrients, such as Vitamin B1, Vitamin B3, and iron are sometimes added back into the white rice making it "enriched", as food suppliers

Rice, brown, long-grain, raw

Nutritional value per 100 g (3.5 oz)	
Energy	1,548 kJ (370 kcal)
Carbohydrates	77.24 g
Sugars	0.85 g
Dietary fiber	3.5 g
Fat	2.92 g
Protein	7.94 g
Water	10.37 g
Thiamine (Vit. B1)	0.401 mg (31%)
Riboflavin (Vit. B2)	0.093 mg (6%)
Niacin (Vit. B3)	5.091 mg (34%)
Pantothenic acid (B5)	1.493 mg (30%)
Vitamin B6	0.509 mg (39%)
Folate (Vit. B9)	20 µg (5%)
Calcium	23 mg (2%)
Iron	1.47 mg (12%)
Magnesium	143 mg (39%)
Manganese	3.743 mg (187%)
Phosphorus	333 mg (48%)
Potassium	223 mg (5%)
Sodium	7 mg (0%)
Zinc	2.02 mg (20%)

Percentages are relative to US recommendations for adults.

Source: USDA Nutrient database

in the US are required to do by the Food and Drug Administration (FDA).^[1]

One mineral not added back into white rice is magnesium; one cup (195 grams) of cooked long grain brown rice contains 84 mg of magnesium while one cup of white rice contains 19 mg.

When the bran layer is removed to make white rice, the oil in the bran is also removed. Rice bran oil may help lower LDL cholesterol.^[2]

Among other key sources of nutrition lost are small amounts of fatty acids and fiber.

In addition to having greater nutritional value, brown rice is also said to be less constipating than white rice.

Cooking and preparation

A nutritionally superior method of preparation using GABA rice or germinated brown rice (GBR), developed during the International Year of Rice, may be used.^[3] This involves soaking washed brown rice for 20 hours in warm water (38 °C or 100 °F) prior to cooking it. This process stimulates germination, which activates various enzymes in the rice. By this method, it is possible to obtain a more complete amino acid profile, including GABA.

Storage and preservation

Brown rice can remain in storage for 6 months under normal conditions, but hermetic storage and freezing can significantly extend its lifetime. Freezing, even periodically, can also help control infestations of Indian meal moths.

See also

- Genmaicha, a Japanese green tea combined with roasted brown rice
- Hyeonmi cha, a Korean tisane made from roasted brown rice
- Parboiled rice

References

1. ^ http://edocket.access.gpo.gov/cfr_2001/aprqr/21cfr137.350.htm
2. ^ "Rice bran oil, not fiber, lowers cholesterol in humans". American Journal of Clinical Nutrition. 2005. <http://www.ajcn.org/cgi/content/abstract/81/1/64>. Retrieved 2008-02-11.
3. ^ Ito, Shoichi and Ishikawa, Yukihiro (2004-02-12). "Marketing of Value-Add Rice Products in Japan: Germinated Brown Rice and Rice Bread". <http://www.hatsuga.com/DOMER/english/en/GBRRB.html>. Retrieved 2007-11-28.

External links

Retrieved from "http://en.wikipedia.org/wiki/Brown_rice"

Categories: American Chinese cuisine | Cuisine of the San Francisco Bay Area | Rice dishes | Rice | Varieties of rice

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